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Abstract

5 The invention proposes an internal combustion engine and an exhaust-gas purification method for an internal combustion engine having an exhaust-gas purification system comprising an NOx storage catalytic converter and a downstream SCR catalytic converter, wherein the
10 NOx storage catalytic converter can be supplied in a first operating mode with an oxidizing exhaust gas and in a second operating mode with a reducing exhaust gas. In the first operating mode, the NOx storage catalytic converter removes NOx from the exhaust gas by
15 accumulation. In the second operating mode, accumulated NOx is at least partially reduced to form NH₃ in the NOx storage catalytic converter.

According to the invention, a third operating mode is
20 provided in terms of time after the first operating mode and before the second operating mode, in which third operating mode an exhaust gas which has a lower content of oxidizing constituents than the first operating mode and a lower content of reducing
25 constituents than the second operating mode can be supplied to the NOx storage catalytic converter.